

30. (new) An audio system, comprising:
- a cabinet;
 - an active radiator sealed within a first opening of a wall of said cabinet for emitting acoustic radiation symmetrically inward into said cabinet and outward into the environment outside of said cabinet;
 - at least one passive radiator sealed within a second opening of a wall of said cabinet for emitting acoustic radiation symmetrically inward into said cabinet and outward into the environment outside of said cabinet in response to radiation generated by said active radiator;
 - an acoustic sensor suspended within said cabinet in close proximity to said active radiator for sensing total acoustic radiation generated by both said active and said passive radiators;
 - a closed loop circuit connecting said acoustic sensor with said active radiator.
31. (new) The audio system of claim 30, wherein the active radiator and passive radiator are sealed within first and second openings in different walls of said cabinet.
32. (new) The audio system of claim 30, wherein the passive radiator is sealed in a cabinet wall opposite the cabinet wall in which the active radiator is sealed.
33. (new) The audio system of claim 30, comprising a plurality of passive radiators sealed within different cabinet walls.

34. (new) The audio system of claim 30, wherein said closed loop circuit further comprises a means for adjusting the audio output of said active radiator based on the total acoustic radiation sensed by said acoustic sensor.
35. (new) The audio system of claim 34, wherein said means is a servo system.
36. (new) The audio system of claim 30, wherein the said closed loop circuit further comprises a feedback control system that corrects the signal sent to the active radiator such that total acoustic radiation sensed approaches said input signal.
37. (new) The audio system of claim 30, wherein the said closed loop circuit further comprises a feedback control system that corrects the signal sent to the active radiator such that the audio output behaves independent of audio frequency.
38. (new) The audio system of claim 30, wherein said active radiator is a speaker mounted inversely into said first opening.
39. (new) The audio system of claim 30, wherein said active radiator is a horn-shaped speaker, a first acoustic sensor is suspended within the throat of said horn-shaped speaker to sense primarily high frequency radiation emitted by said speaker, and a second acoustic sensor is suspended within said cabinet between said active and passive radiator to sense total acoustic radiation.
40. (new) The audio system of claim 30, wherein said acoustic sensor is a speaker.

41. (new) The audio system of claim 30, wherein said acoustic sensor is
suspended in said cabinet by means of a damped elastic mounting structure.
42. (new) The audio system of claim 30, wherein said active radiator comprises
an electrodynamic planar speaker.
43. (new) The audio system of claim 30, wherein said active radiator comprises
an electrostatic planar speaker.
44. (new) The audio system of claim 30, further comprising acoustic absorbing
material contained in said cabinet.
45. (new) The audio system of claim 30, wherein said passive radiator comprises
a solid surface sealed and suspended within said second opening.
46. (new) The audio system of claim 30, wherein said passive radiator comprises
a flexible cabinet wall.

47. (new) A method for improving acoustical accuracy in an audio system comprising the steps of:

sealing an active radiator within a first opening in a wall of a cabinet, said active radiator being capable of emitting radiation symmetrically inward into said cabinet and outward into the environment outside said cabinet;

sealing a passive radiator within a second opening in a wall of said cabinet, said passive radiator being capable of emitting radiation symmetrically inward into said cabinet and outward into the environment outside said cabinet in response to radiation generated by said active radiator;

suspending an acoustic sensor within said cabinet in close proximity to said active radiator; and

adjusting the audio output from the first speaker based on total acoustic radiation sensed by said acoustic sensor through a closed-loop feedback control system connecting said acoustic sensor to said active radiator.

48. (new) The method of claim 47, wherein the passive radiator is sealed in a cabinet wall opposite the cabinet wall in which the active radiator is sealed.

49. (new) The method of claim 47, wherein said closed-loop feedback control system corrects the signal sent to the active radiator such that total acoustic radiation sensed approaches said input signal and the audio output behaves independent of audio frequency.